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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,214	03/26/2004	Jyun-Naih Lin	250908-1240	1932

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EXAMINER

MOUTAOUAKIL, MOUNIR

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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07/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/811,214

Applicant(s)

LIN, JYUN-NAIH

Examiner

Mounir Moutaouakil

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Crow et al by (US 6,453,357). Hereinafter referred to as Crow.

Regarding claims 1, 5, and 8. Crow discloses a method of network address port translation and fast look-up, implemented in a gateway connecting a virtual network and an external network (see figure 1), wherein the virtual network comprises at least a server (see figure 1, where servers are part of the internet), and the external network comprises at least a host (see figure 1, where elements 24 are hosts) comprising the steps of: creating a translation table including a plurality of translation data each provided with an index and comprising host address and port information, server address and port information, and gateway address and port information, the server address and port information comprising server internet protocol (IP) address and port information (see column 4, lines 50-57. where router 16 includes a translation engine, a translation table, the translation uses the translation table to translate addresses

between the private and the public addresses, elements 12 and 14); receiving, from the host, a first data packet comprising first source address and port information and first destination address and port information, wherein the first source address and port information comprise first source IP address and first source port information (See figure 3, inside IP address and inside port address); searching corresponding translation data of the first data packet in the translation table; translating the first source IP address or port information into a factor related to the index (see figure 3. fragment context) of the translation data and the first destination address and port information into the server address and port information of the corresponding translation data when the corresponding translation data of the first data packet is located (see figure 3, outside IP address, outside port); and transporting the first data packet to a corresponding server according to the server IP address therein (figure 3, see column 4, lines 50-57 packets are transferred from a public IP address space to a private IP address space or vice versa with respect to the IP address therein). The method comprises a processing unit for searching corresponding translation data in the translation table while packets are being transmitted (see figure 4. figure a process that requires a processor for searching the corresponding translation data in the translation table while data is being transmitted from one space to another and vice versa).

Regarding claims 2, 6, and 9-11. The method of Crow further comprises the steps of: receiving a second data packet comprising second source address and port information and second destination address and port information, wherein the second destination address and port information comprises second destination IP address and

second destination port information (see figure 1. where router 12 routes packets from private IP address space to public IP address space and vice verse. See figure 3, element 12 comprises inside IP address, inside port, outside IP address, and outside port to route packets using the IP address), the second destination IP address or second destination port information is a second factor related to a second index (see figure 3, every packet transmitted is related to a fragment context); acquiring the related second index according to the second factor and retrieving corresponding translation data of the second data packet from the translation table according to the second index directly (see figure 4, element 118, and 122); translating the second source address and port information into gateway address and port information of the translation data and the second destination IP address or port information into host IP address or port information of the translation data; and transporting the second data packet to a corresponding host according to the IP address of the corresponding host (see figure 1. where router 12 routes packets from private IP address space to public IP address space and vice verse. See figure 3, element 12 comprises inside IP address, inside port, outside IP address, and outside port to route packets using the IP address).

Regarding claims 3 and 12. The method of Crow further comprises maintaining a mapping table in the gateway, storing a plurality of mapping data each comprising server address and port information and gateway address and port information. (See figure 3. and see column 4, lines 50-57. the method comprises a Cisco 675 router manufactured by Cisco systems, Inc, or other suitable border router or device capable of translating addressing information between disparate addressing systems. Cisco

routers are capable of storing plurality of mapping data comprising server address and port information and device address and port information).

Regarding claims 4, 7, 13 and 14. The method of Crow further comprises the steps of: searching related mapping data in the mapping table according to the first destination address and port information when corresponding translation data of the first data packet is not located in the translation table (See figure 4 the transition from element 102 to 108 or 104); adding new translation data assigned with a third index in the translation table, which comprises the searched mapping data and the first source address and port information (See figure 4, elements 108-124); translating the first source IP address or port information into a factor related to the third index and first destination address and port information into server address and port information of the searched mapping data (see figure 4, elements 108-124); and transporting the first data packet to a corresponding server according to the IP address of the corresponding server (see figure 4, END, the packet is transported to the proper server according to the IP address).

Conclusion

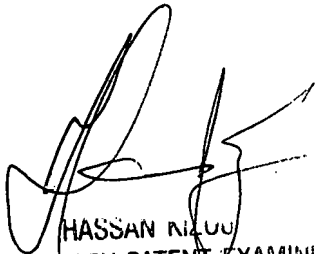
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mounir Moutaouakil whose telephone number is 571-270-1416. The examiner can normally be reached on Monday-Thursday (4pm-4:30pm) eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit: 2616



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